



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/010,054	12/07/2001	Gary A. Ott Merl	14060/249318 (IRC296)	7839
23370	7590	03/21/2005	EXAMINER	
JOHN S. PRATT, ESQ KILPATRICK STOCKTON, LLP 1100 PEACHTREE STREET ATLANTA, GA 30309			CHANG, VICTOR S	
			ART UNIT	PAPER NUMBER
			1771	

DATE MAILED: 03/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/010,054

Applicant(s)

MERTL ET AL.

Examiner

Victor S Chang

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) 9-19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Introduction***

1. The Examiner has carefully considered Applicants' amendment to claim 8, and remarks filed on 11/4/2004. Drawing replacement sheets filed 1/10/2005 has been accepted.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Rejections not maintained are withdrawn.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The Examiner notes that in independent claim 1, lines 4-5, the phrase "bonded ... without the use of ... laminations" appears to be indefinite and confusing. It should be noted that the structure of the spacer recited in lines 1-4 "A spacer ... comprising: a first foam layer ... and bonded ... a second foam layer" is inherently a laminated structure. As such, the phrase "bonded ... without the use of ... laminations" appears incommensurate with the structure of the spacer, and indefinite and confusing.

Clarification is required. Additionally, the Examiner would like to point out that while at line 5 the terms “adhesives” and “bonding agents” are materials for bonding, the term “laminations” is a structural relationship between layers, not a material for bonding.

***Rejections Based on Prior Art***

6. Claims 1-6 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cascino (US 4806404) in view of Cascino (US 5328937), and further in view of Adler et al. (US 3852389), generally as set forth in section 9 of Office action dated 7/2/2004, together with the following additional reasoning and response to argument.

Applicants' argument “the present application teaches one or more embodiments of a spacer in which the first and second foam layers are bonded together to form a single structure without the use of any adhesive ... It is clear that Cascino '404 and Cascino '937 do not teach or suggest ... a single structure without the use of adhesives, laminations, or other bonding agents ...” (Remarks, page 11, top paragraph) has been carefully considered, and is persuasive. The Examiner apologizes for having overlooked this structure effecting product-by-process limitation. For the purpose of clarification, the Examiner restates the teachings of Cascino '404 as follows: Cascino '404 is directed to a self-adherent spacer member for positioning between fragile objects, such as glass panels, during shipment. The spacer includes a tack (cling) layer of sufficient adhesive properties to allow the spacer to adhere to the surface of the fragile object without the use of a surface tape (Abstract). The tack layer is preferably formed of a foamable polymeric material such as foamable polyvinyl chloride, foamable

Art Unit: 1771

polyurethane, etc. (column 2, lines 2-4). The spacer also comprises a backing (second) layer of base material bonded directly to a tack layer (column 1, lines 19-20). Preferably the backing layer is a semi-rigid polymeric material such as a closed cell polyethylene foam, but any material sufficient to be a backing, and does not scratch glass panels may be used (column 1, line 66 to column 2, line 2). In an Example, Cascino '404 teaches that the tack layer is formed from a foamable polyvinyl chloride plastisol, and the tack layer is laminated to a polyethylene foam back cushion layer via an acrylic adhesive (column 1, lines 66-68; column 2, lines 20-30).

For claims 1 and 4-6, the Examiner rewrites the reasoning as follows: Cascino '404 lacks an express teaching that the backing (second) layer is a higher density foam and the two layers form a single structure without the use of adhesives or other bonding agents. However, it is noted that Casino '404 does expressly teach that any material sufficient to be a backing and does not scratch glass panels may be used, as set forth above. Further, it is noted that Cascino '937 is directed to a foam spacer which is usable as a cork substitute in the base cushion layer (i.e., backing layer) of a glass spacer. The spacer (back layer) is preferably laminated to a tack layer, and is formed from a plasticized foamable resin (Abstract), such as a PVC plastisol (column 2, line 49 to column 3, line 3); and the foam has a density of 25 lbs./ft<sup>3</sup> and having properties similar to natural cork (column 3, lines 8-11; the Examiner notes that the publication of Casino '937 contains an apparent typo by printing the unit of density as lbs./ft.) As such, in the absence of unexpected results, it would have been obvious to one of ordinary skill in the art to substitute the polyethylene back cushion layer of Cascino '404

Art Unit: 1771

with a known equivalent backing layer of Cascino '937, i.e., a foamed PVC plastisol, with a cork-like semi-rigid polymeric backing material. It should be noted that the selection of a known material based on its suitability for its intended use supported a *prima facie* obviousness determination. See MPEP § 2144.07. Regarding the bonding between the tack layer and the backing layer, it is noted that Adler's invention is directed to a method of making an PVC plastisol foam body by heat foaming a two-layered structure of a first layer of plastisol containing a small amount of blowing agent, and a second layer of plastisol containing a significantly greater amount of blowing agent (column 1, lines 54-63; column 2, lines 48-49). The two layers are fused together to form an integral foam body, i.e., a single structure (column 1, line 50; column 8, lines 13-14). As such, in the absence of unexpected results, it would have been obvious to one of ordinary skill in the art of multilayered plastisol foams to modify the teachings of Cascino '404 and Cascino '937 by foaming the two plastisol layers together, as taught by Adler, motivated by the desire to obtain a fused integral foam structure for a strong bonding between the two layers. Finally, regarding the densities of the foam layers, it is noted that the density of 25 lbs./ft<sup>3</sup> taught by Cascino '937 reads on the density of the second layer of instant invention as claimed. Although Cascino '404 is silent about the density of the tack foam layer, since Cascino '404 teaches substantially the same subject matter (a self-adherent spacer comprising a tack plastisol foam layer and for the same application of protecting fragile objects), it is the Examiner's position that a suitable density of the tack foam layer is an obvious selection and/or optimization to one of ordinary skill in the art of self-adhering spacers, motivated by the desire to obtain a

Art Unit: 1771

suitable tack foam layer for protecting fragile objects. It should be noted that where the claimed and prior art products are shown to be identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a *prima facie* case of either anticipation or obviousness has been established. See MPEP § 2112.01.

7. Claims 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cascino (US 4806404) in view of Cascino (US 5328937), or further in view of Adler et al. (US 3852389) and Lerman (US 3616029), generally as set forth in section 10 of Office action dated 7/2/2004, together with the additional reasoning as set forth above.

With respect to Applicants' argument "Embossing for improved cushioning, which the Examiner states is well known in the art and taught by *Leman*, is taught away by *Cascino '404*. First base layer 14 of *Cascino '404* must be formed of a semi-rigid material sufficient to provide a backing for tack layer 16" (Remarks, page 11, bottom paragraph), the Examiner notes that while *Cascino '404* teaches that the base layer 14 is formed of a semi-rigid material, *Casicino '404* does expressly teaches that base layer 14 functions as a cushion (column 1, line 63). As such, *Cascino '404* does not teach away from *Leman*, i.e., embossing improves cushioning property and affords improved protection for fragile objects such as glass, Applicants' argument to the contrary notwithstanding. Further, the Examiner notes that there is nothing inherent to a semi-rigid material to prevent it from being a cushioning material.

With respect to Applicants' argument "Embossing a surface of base layer 14 may, in fact, make the spacer to compressible and unable to withstand the weight of

Art Unit: 1771

numerous sheets of glass, and thus additional cushioning may not be desirable.”

(Remarks, page 11, bottom paragraph), the Examiner notes that in the absence of factual support, Attorney’s argument cannot take place of evidence. Additionally, the Examiner notes that Applicants appear to argue against their own invention as being not desirable as well.

### ***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor S Chang whose telephone number is 571-272-1474. The examiner can normally be reached on 8:30 - 5:00.

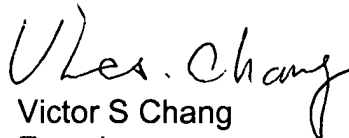
If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Terrel H Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.



Art Unit: 1771

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Victor S Chang  
Examiner  
Art Unit 1771

3/14/2005